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Sweet Marsh Tripoli, Iowa

Part I: Overview of Business

Sweet Marsh Tripoli, Iowa is 3,157 acres of marsh, timber and upland 4 miles NE of Tripoli on Hwy 93. Game includes deer, waterfowl and doves. The DNR manages this land to optimize its use for hunting and fishing.

Part II: Job Specifics

The DNR’s task at Sweet Marsh is to regularly adjust marsh water levels to foster conditions for the growth of natural and cultivated vegetation. This provides needed habitat for animals that hunters enjoy. Management is constant as river levels change.

Part III: Introduce the Problem

Given the current conditions, what is the best combination of planted food plots and marsh water levels to maximize animal habitat?

Part IV: Background

- DNR workers must know:
- Types of animals that will attract hunters and fishers.
  - Habitat needs of each animal.
  - Water control structures effects.
  - Food plot crop details.
  - Current conditions.

Part V: Business Solution

This puzzle changes each year. DNR workers have to react to current weather conditions, constantly adjusting water containment structures and planting and replanting food plots as needed.

Part VI: Student Scenario:

June 2018 was rainy with high river levels. If food plots for the animals are washed out. Should they be replanted?